

ABSTRACT OF THE DISCLOSURE

A base station controller system comprises a high data rate distributed switching fabric providing flexible access to call processing resource pools. The arrangement permits a system controller to selectively assign specific resources depending on call type based on configuring the distributed switching fabric. The transport links comprising the distributed switching fabric provide redundant access to each of the resource pools, greatly reducing the portion of overall call processing capability lost with a single failure. Preferably, the distributed switching fabric comprises a central ATM switch and a number of distributed ATM switches interconnecting the resource pools to the central switching resource. The system may adopt a rack arrangement wherein a processing subrack includes the mix of different processing resources necessary to support substantially all call flow processing for one or more types of calls. The system's call capacity is thus easily scalable based on adding additional processing subracks.